



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,262	09/13/2000	Eiji Teraue	Q60758	8335

7590 05/21/2004

SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 Pennsylvania Avenue NW
Washington, DC 20037-3202

EXAMINER

STEPHANY, TIMOTHY J

ART UNIT	PAPER NUMBER
----------	--------------

2622

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/661,262

Applicant(s)

TERAUE, EIJI

Examiner

Timothy J. Stephany

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


TWYLER LAMB
PATENT EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/9-13-00
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Specification

The disclosure is objected to because of the following informalities:

On page 2, line 20: grammatical error, "the proof image coincides" should read "the proof image that coincides".

On page 3, line 9: grammatical error, "Here, a printing" should read "Here, printing".

On page 3, line 23: typographical error, "three colors ofRGB" should read "three colors of RGB".

On page 4, line 7: misspelled word, "rear that" should read "rare that".

On page 4, line 18: typographical error, "(coordinates" should read "(coordinate".

On page 6, lines 11-12: confused rendering, "for example, such a system that usually, a proof image is displayed" must be rendered to convey the meaning properly in English.

On page 6, line 27: confused rendering, "includes a greatly large scale LUT" should read "includes an extremely large LUT".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokazu ('392) in view of Laumeyer ('577).

Regarding **claims 1 and 2**, Hirokazu discloses a method and apparatus for color correction, whereby the initial colors emerging from the color separator (**18** in Figure 1, and paragraph 0021) that are CMYK (first color space) are split and through the "printing profile" (**26** in Figure 1 and paragraph 0022) emerge in a device independent color space CIEXYZ, and then through a "printer profile" (proof condition conversion step) emerge again in RGB (second color space) where they are then sent to the printer (proofer) (figure 1 and paragraphs 0024-0025).

Hirokazu does not disclose expressly that there is a spot color reference step whereby a spot color name is converted into the device-independent space and that there is a composition step in which the process color and the spot color are

synthesized in either the device-independent space or the second color space and output in the second color space.

Laumeyer discloses that a Pantone color (considered a spot color) can be transformed through a look-up table (LUT) or mapping through a color space into CMYK (col. 1, lines 66-67 and col. 2, lines 1-2). This suggests mapping of a spot color into a color space that is device independent and then into a second color space, where it can then be combined with other CMYK data. In this case, any color space can be converted into any other color space, where it would be both obvious to do this through a device-independent space and that the data represented in the same color space is combinable for output to an output device (by the nature of an output device such data must be combined in order to be output).

Hirokazu & Laumeyer are combinable because they are from the same field of endeavor and thus constitute analogous art, being that of printer color processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to process a spot color and process color from a first color space through an independent color space to a second color space, where these data will be combined and sent to a printer, including all embodiments that arise from a simple reordering or combination of steps, or removal of certain steps, whereby the calculations and the output are the same and act in the same manner.

The suggestion/motivation for doing so would have been that a printing apparatus that uses CMYK for printing can also and is used with systems that renders an image with a printer that suggests the use of the use of spot colors.

Therefore, it would have been obvious to combine Hirokazu with Laumeyer to obtain the invention as specified in claims 1 and 2.

Regarding **claim 3**, the recitation of a method that converts from a first color space into a device-independent color space and then into a second color space as set forward in claim 1 has been discussed above. Combining the steps of conversion from the colorimetric space into a second color space in the synthesizing step is a design choice that would have been obvious to a person skilled in the art and thus is rejected under the same justification as for claim 1.

Regarding **claim 4**, the recitation of a method that converts from a first color space into a device-independent color space and then into a second color space as set forward in claim 2 has been discussed above. Combining the steps of conversion from the colorimetric space into a second color space is a design choice that would have been obvious to a person skilled in the art and thus is rejected under the same justification as for claim 2.

Regarding **claims 5 and 6**, the recitation of an apparatus that converts from a first color space into a device-independent color space and then into a second color space as set forward in claim 1 has been discussed above.

The use of coordinate conversion definition (LUT's) is disclosed in Hirokazu (21-24 and 31-33 in Figure 1 and paragraphs 0022-0023) and an LUT is equivalent to ROM

Art Unit: 2622

and thus is a memory (storage section) so that to accomplish this would have been obvious to a person skilled in the art and thus is rejected under the same justification as for claim 1.

Regarding **claim 7**, the recitation of a apparatus that converts from a first color space into a device-independent color space and then into a second color space as set forward in claim 5 has been discussed above. Reordering the steps of conversion by combining after converting into the colorimetric space but before converting to the second color space is a design choice that would have been obvious to a person skilled in the art and thus is rejected under the same justification as for claim 5.

Regarding **claim 8**, the recitation of a apparatus that converts from a first color space into a device-independent color space and then into a second color space as set forward in claim 5 has been discussed above. Combining the steps of conversion from the first to the second color space for the process color and performing the steps of conversion of the spot color from the first color space into a device-independent color space and then into the second color space is a design choice that would have been obvious to a person skilled in the art and thus is rejected under the same justification as for claim 5.

Regarding **claim 9**, the means of accomplishing the method or apparatus is implied within it. If a small number of potential embodiments come to them mind of one skilled

Art Unit: 2622

in the art such that it would have been obvious to apply them as a means, in this case, the use of a storage medium, then the reference anticipates the claim, and thus is rejected under the same justification as claim 1.

Additional Notes

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

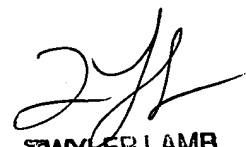
Ringness ('395), Nishikawa ('427), Azima ('676), Reed ('653) refer to color conversion of spot colors; Tolmer ('975), Maltz ('849), Viturro ('244), McCann ('089) refer to spot colors; Wu ('202), Kawai ('060) refer to color separation and processing; Jodra (US 2002/0149644 A1), Iwasaki (US 2003/0043393 A1), Dewitte (US 2002/0008880 A1) refer to spot color proofing.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Stephany whose telephone number is 703-305-8951. The examiner can normally be reached on 8:30 am - 4:30 pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TWYLER LAMB
PATENT EXAMINER